FMMUG
Empowering Building Efficiency and Occupant Experience through Workplace Analytics with Maximo Application Suite Monitor and TRIRIGA

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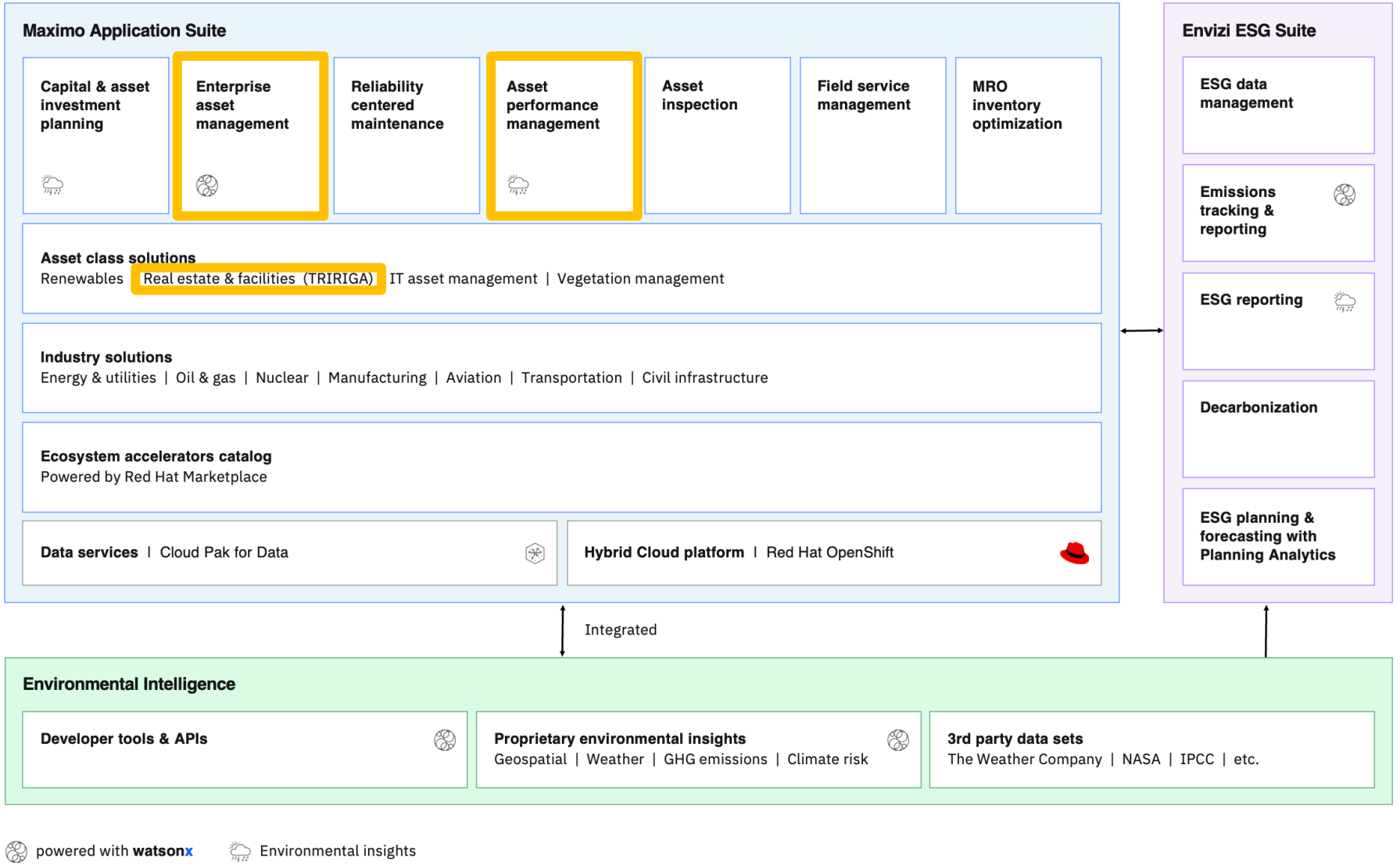
October, 2024

IBM Asset Lifecycle Management powered by Maximo

IBM Asset Lifecycle Management is an integrated solution powered by Maximo that optimizes the whole-life asset performance and operations for wide-ranging industries and asset classes, leveraging AI, IoT, and environmental data.

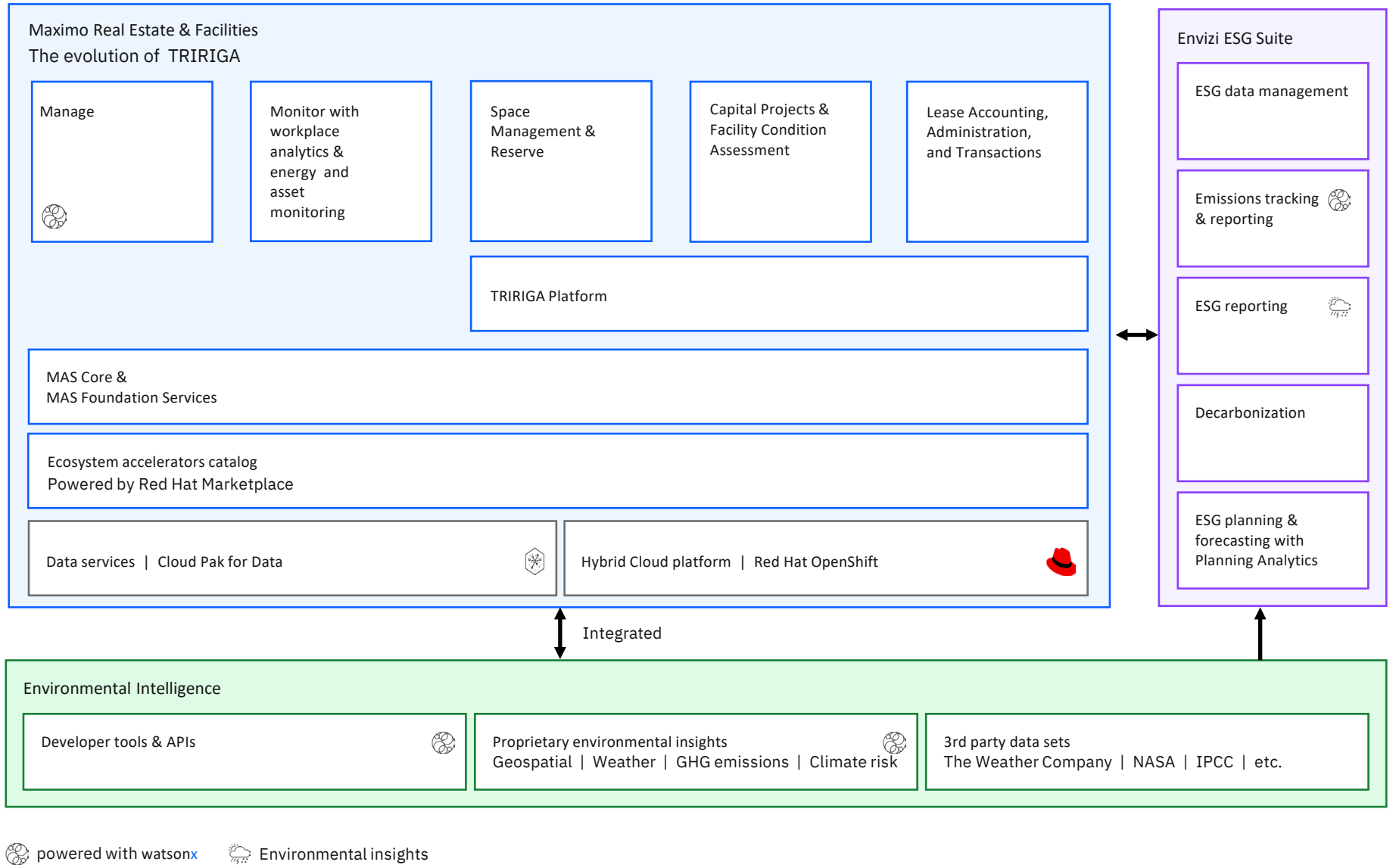


ALM from a facility management lens

We’re bringing our Real Estate and Facilities capabilities into MAS, sharing common infrastructure, to make it easier to utilize more capabilities.

A unified App Point licensing metric will be used, allowing you access to all capabilities.

Our intent is to make this available in 1H25.



Real estate and facilities lifecycle should be managed as an integrated system

On-Boarding | Utilize | Disposal

Acquire → **Build-out** → **Populate Portfolio Data** → **Administer Real Estate** → **Experience** → **Maintain** → **Dispose**

Acquire
- Portfolio assessment
- Identify requirements
- Search for potential locations
- Compare potential locations
- Justify lease or purchase decision
- Exercise lease options
- Execute purchases

Build-out
- Estimate projects
- Prioritize and execute environmental improvement projects
- Establish and manage schedules
- Manage proposals
- Manage commitments and payments
- Manage project risks, changes and progress
- Plan and instrument IoT technology
- Track carbon reduction to project progress
- Project close-out

Populate Portfolio Data
- Populate location hierarchy
- Load floorplans from CAD/BIM
- Load assets
- Manage space details
- Manage space allocations
- Assign seats
- Synthesize utility and BMS data sources
- Ingest energy, waste and water data for reporting and KPIs
- Convert utility and fuel consumption data to carbon emissions

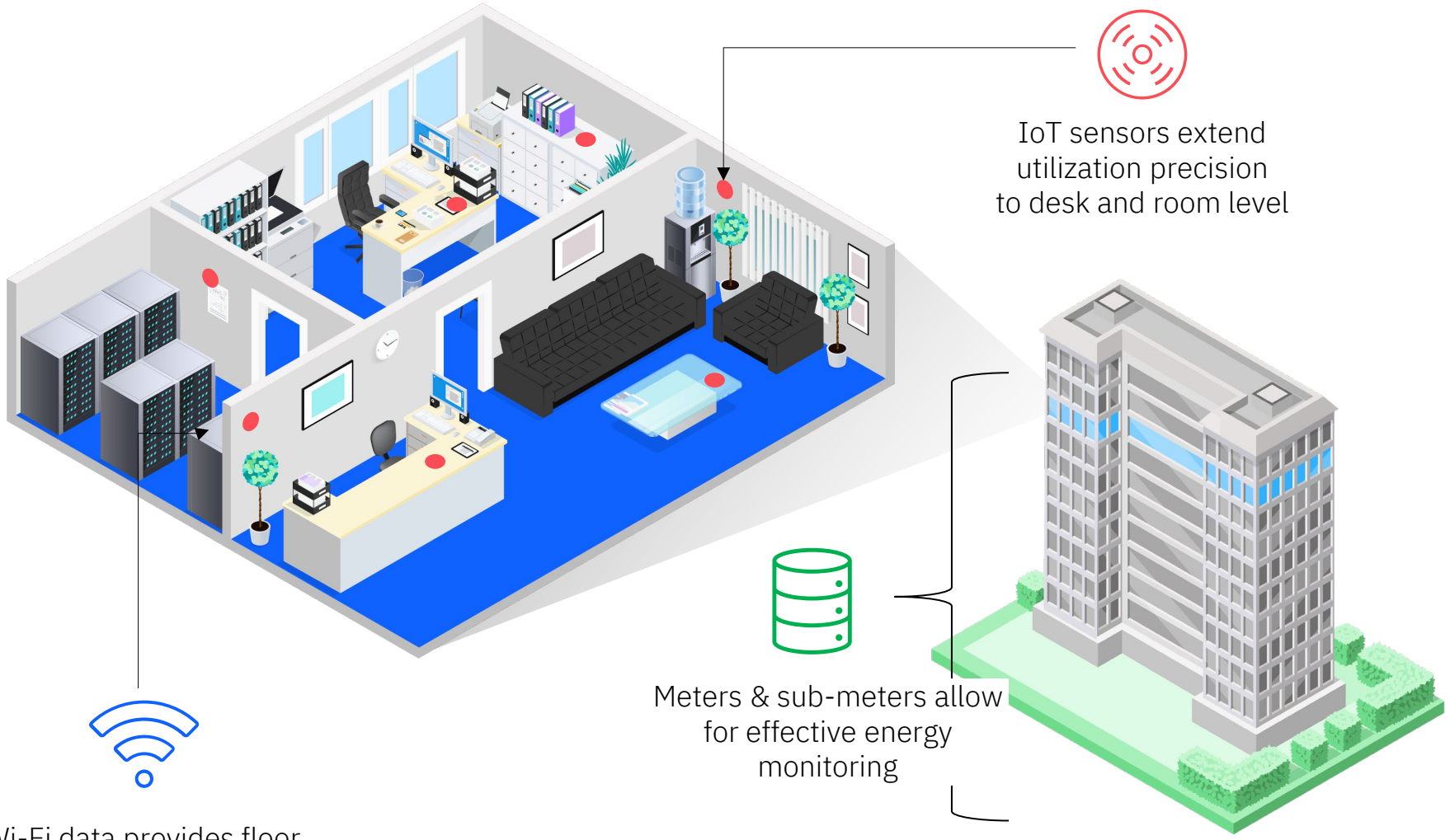
Administer Real Estate
- Abstract new leases
- Meet lease accounting regulations
- Manage lease financials
- Track critical dates
- Comply with lease terms
- Renegotiate leases
- Execute property management on leased and owned properties
- Track supplier sustainability data
- Aggregate operational KPIs to dashboards
- ESG reporting and risk management
- Submit facility rating data to agencies

Experience
- Measure real time space use
- Validate space use
- Initiate and manage moves
- Employee workplace services portal
- Reserve work and meeting space
- Indoor wayfinding
- Locate colleagues
- Remote asset monitoring and utilization
- Health analytics for facility use and assets
- HSE Management

Maintain
- Manage and route service requests and demand work orders
- Manage planned, predictive and condition maintenance
- Maintain parts inventory
- Warranty management
- Plan for facility component lifecycle
- Manage facility condition index
- Plan and execute local projects
- Identify environmental improvement projects
- Track utility consumption
- Physical and visual inspections
- Mobile technician WS

Dispose
- Portfolio assessment
- Identify space and facilities to relinquish
- Model space scenarios
- Implement moves
- Identify excess space for disposal
- Define and compare downsize scenarios
- Decide and execute
- Site remediation
- Prepare site to sell or return
- Retire assets
- Report carbon savings from consolidation

IoT & Wi-Fi further enhances the ability to respond to right size portfolios and improve facility operations



IoT sensors extend utilization precision to desk and room level

Meters & sub-meters allow for effective energy monitoring

Wi-Fi data provides floor level occupancy

- Make data driven decisions
- Improve business processes
- Enhance the workplace experience
- Effectively manage real estate costs

MAS Monitor with TRIRIGA unlocks potential to improve facility operations

Understand occupancy patterns and utilization of spaces across facilities to right-size portfolio, manage chargebacks and maximize utilization

Understand energy performance of buildings across portfolios and contextualize with occupancy data

Ensure occupant well being through facility environmental monitoring

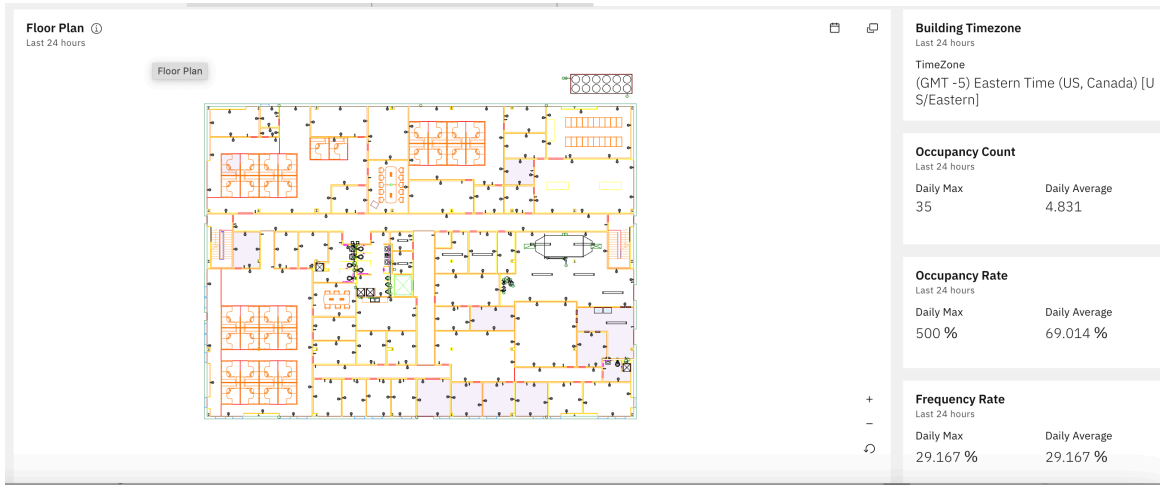
Monitor assets to minimize downtime, improve maintenance scheduling, reduce energy consumption and increase lifespan

Optimize facility services, such as janitorial based on real-time footfall within spaces

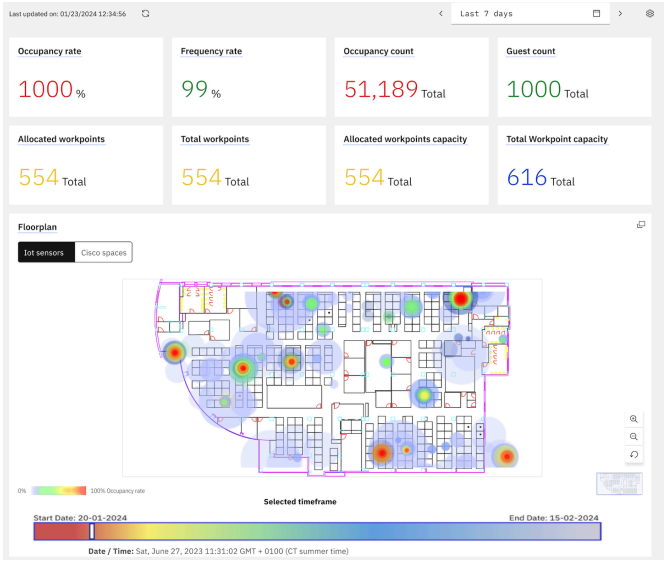
Boost occupant productivity by showing real-time availability of spaces in TRIRIGA Workplace Services app

Expanded MAS Monitor capabilities for Facility & Workplace Analytics

- Leverages TRIRIGA Space Management for portfolio, space and allocation details
- Edge data collector to connect to BMS, controllers, power meters
- New integrations with Cisco Spaces and Webex
- Vendor agnostic IoT Platform using industry standard protocols. MQTT, HTTPs
- Pre-built dashboards for Space Utilization
- Pre-defined metrics and analytics for Space Utilization
- Create custom dashboards and metrics
- Floorplan visualizations for density heatmapping & IoT data overlay



IoT sensors occupancy overlay



Cisco Spaces density heat map

MAS Monitor + TRIRIGA fully integrated

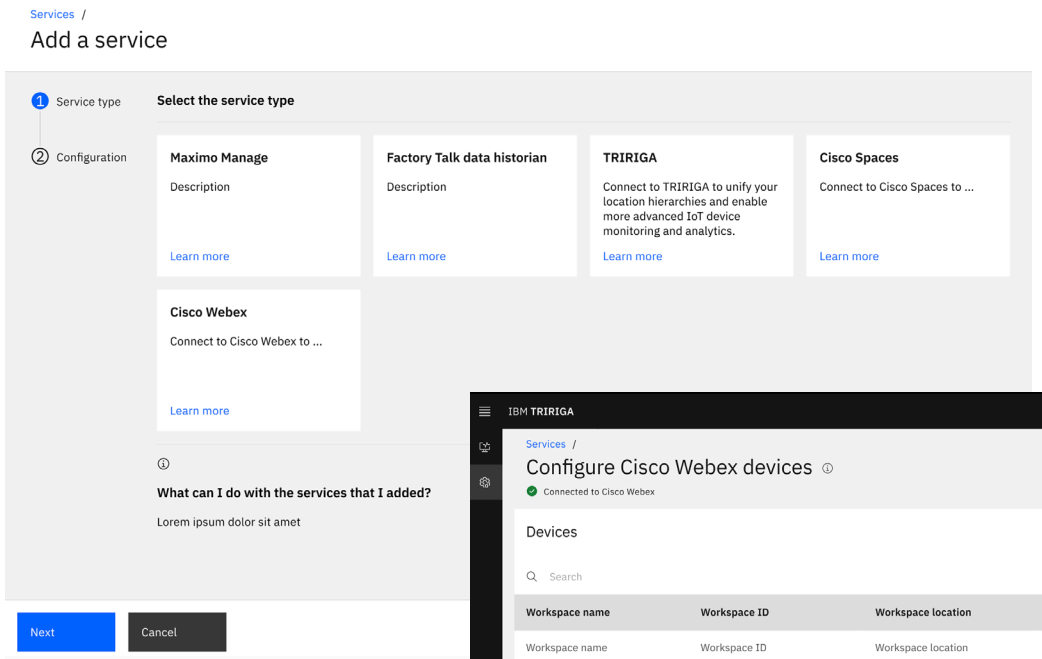
New user interface to streamline setup process and reduce time to value

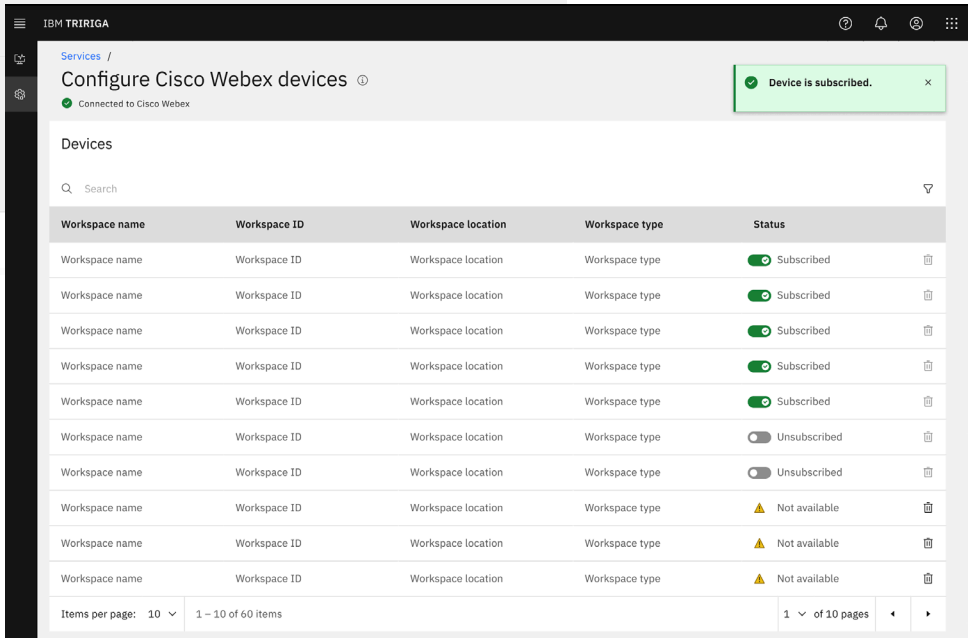
Intuitive UI to select buildings to sync from TRIRIGA with Monitor

- Single location hierarchy shared and synced
- Space management plans synced
- CAD drawings automatically available in Monitor

Manage assignment of IoT sensors to spaces

Manage OOTB integrations with Cisco Spaces, Cisco Webex, & Edge Data Collector



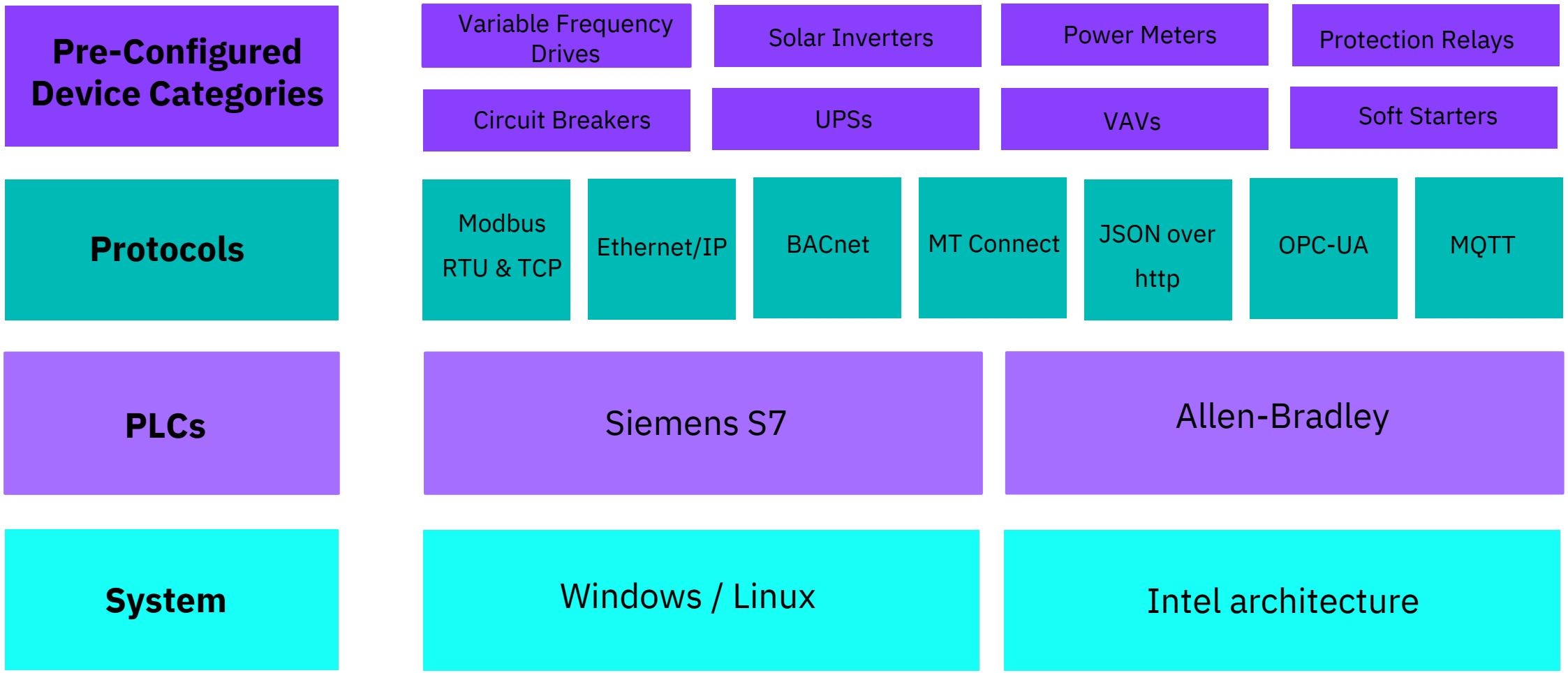


Energy Monitoring enabled by MAS Monitor + TRIRIGA

- Quickly understand energy performance of buildings across portfolio
- Data contextualized with occupancy data to improve operational efficiencies
- Edge data collector allows for fast and easy data acquisition from HVAC and Power Meters
  - Vast library of pre-configured device connectors to cut down roll-out time
  - Ensures device data is uniform and comparable regardless of the source

Examples of device OEMs supported in the data collector library

Technologies currently supported



Primary sensor types to measure occupancy at space level

Motion Sensor

Type: Passive Infrared

- Recommended for individual desks
- Battery powered (recommended)
- Easy install
- Wireless (requires gateway)
- Network or cellular

Under Desk Occupancy Sensor

Footfall Counter

Type: Passive Infrared

- Recommended for ingress/egress of spaces
- Hardwired (PoE) or Wireless
- Network or cellular
- Motion detection
- No camera

PoE People Counting Sensor

Optical Sensor

Type: Image Recognition

- Recommended for rooms and passageways
- Hardwired (PoE) or Wireless
- Network or cellular
- Image processing on device

Camera Sensor

Multi-sensor

Type:

- Recommended for rooms and across floors
- Provided more than one data point eg: occupancy, temp, humidity
- Enable multiple use cases
- Hardwired (PoE) or Wireless

Multi-sensor

Device partners for Workplace Analytics

Wi-Fi, provides building & floor level occupancy in infrastructure-enabled zones

CISCO SPACES

Lambent SPACES

IoT Sensors, extend utilization precision to desk and room level

kontakt.io

webex by cisco

iaconnects

RIGADO

TERABEE

enlighted™ A Siemens Company

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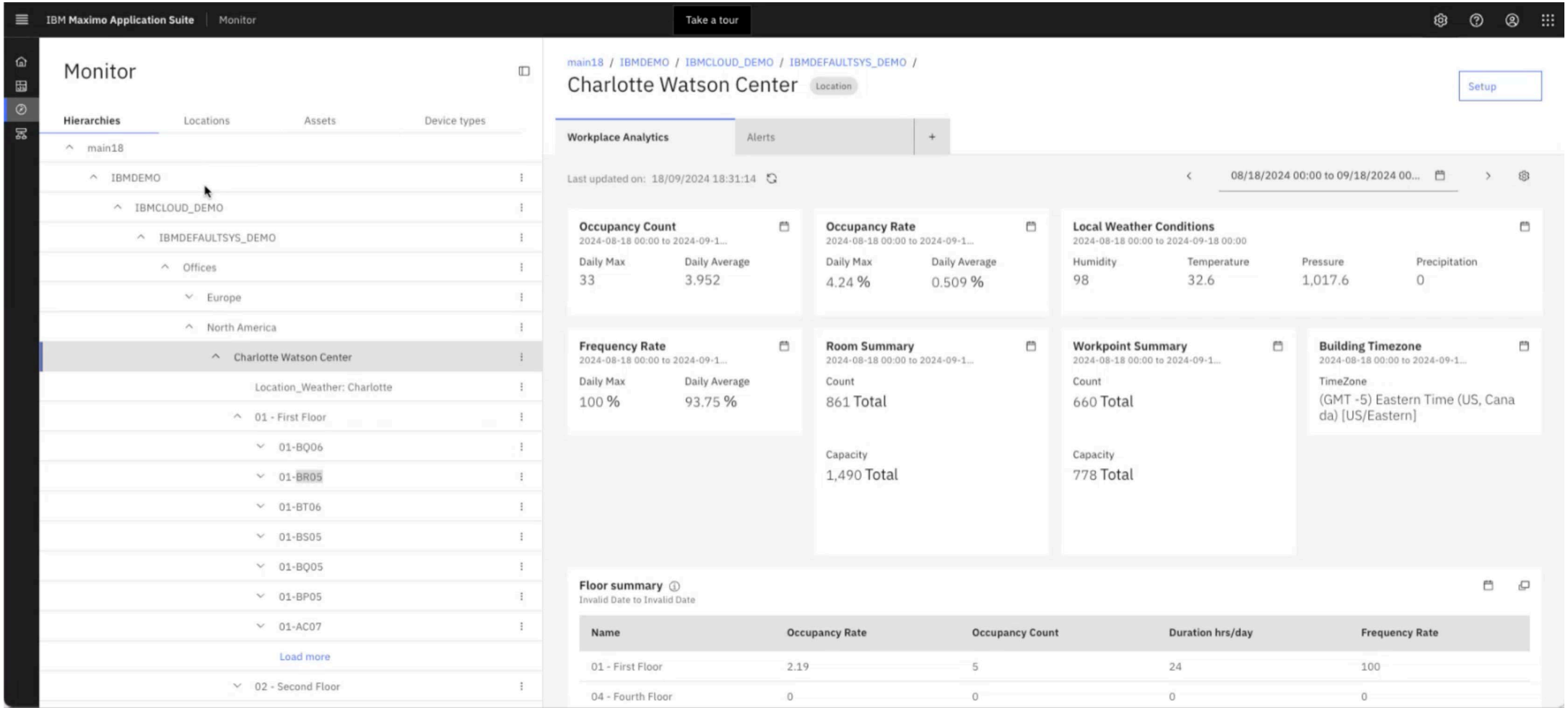
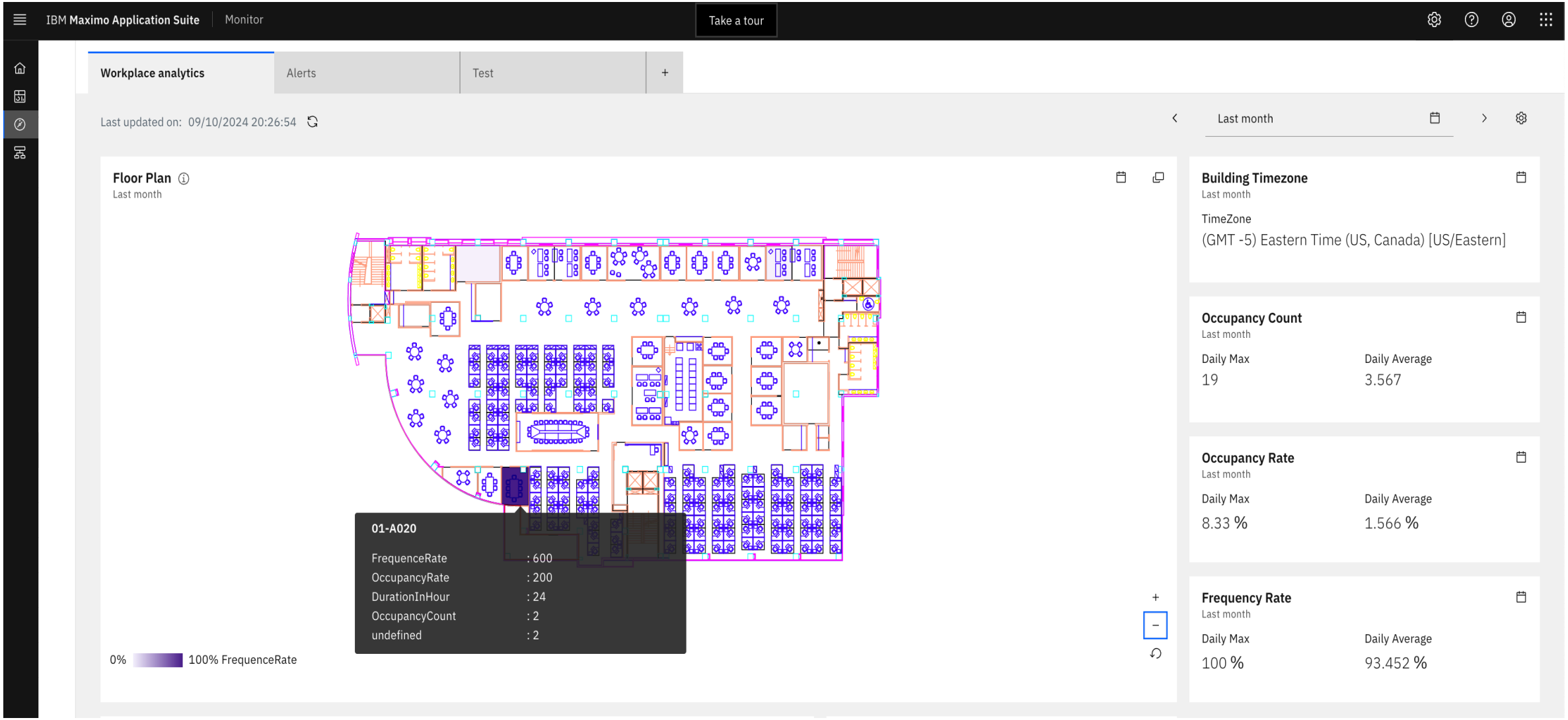
Combine IoT, BMS and external data sources in a single facilities focused dashboard

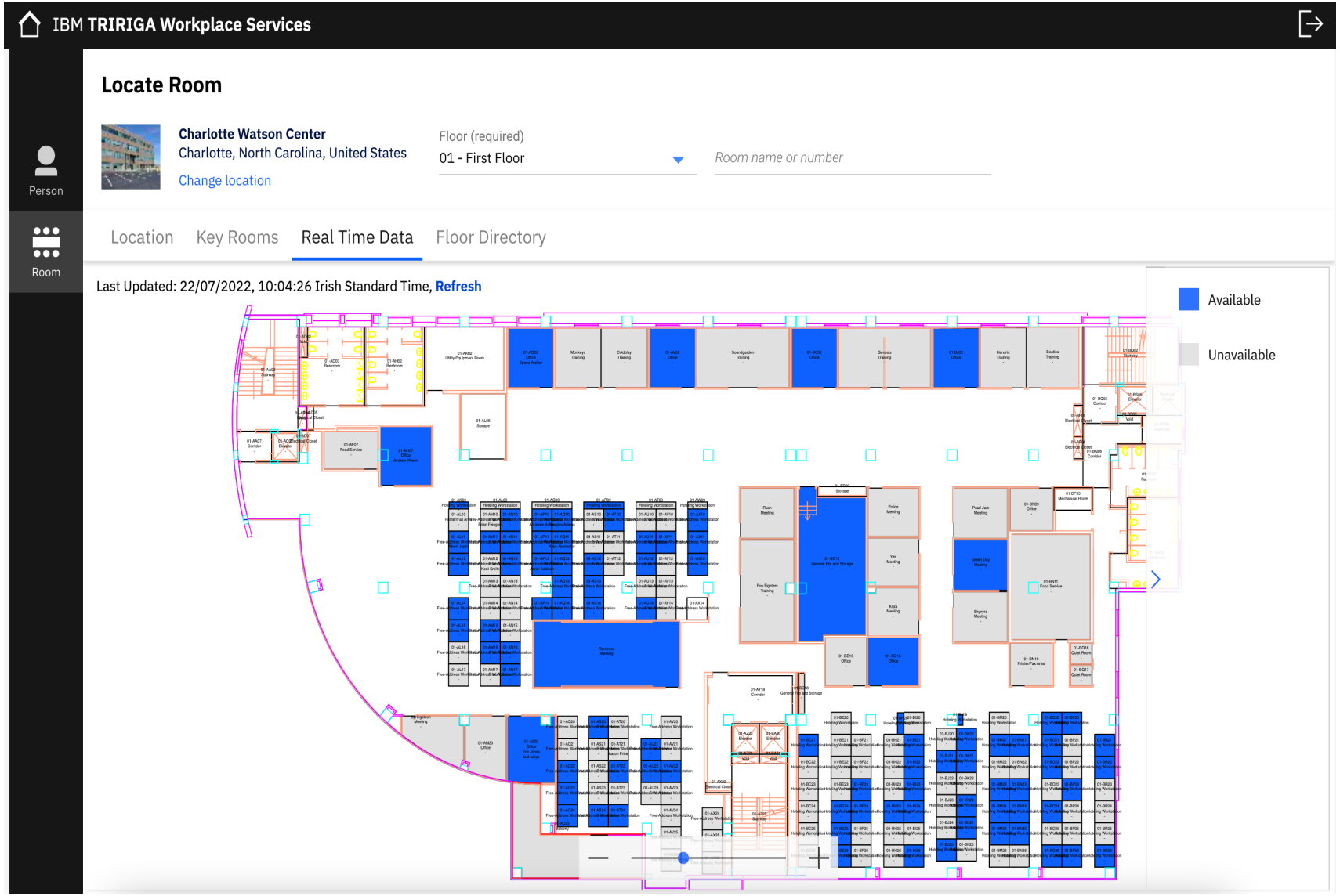


Visualize facility IoT data on a floorplan



New anomaly detection models tailored for occupancy patterns

Find free spaces in Workplace Services

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